

# REDSTONE GATEWAY

## PACKAGE 1 A- MASS GRADING AND EROSION CONTROL PACKAGE (UNSECURE AREA)

FOR THE  
CITY OF HUNTSVILLE  
HUNTSVILLE, ALABAMA

ISSUE FOR CONSTRUCTION

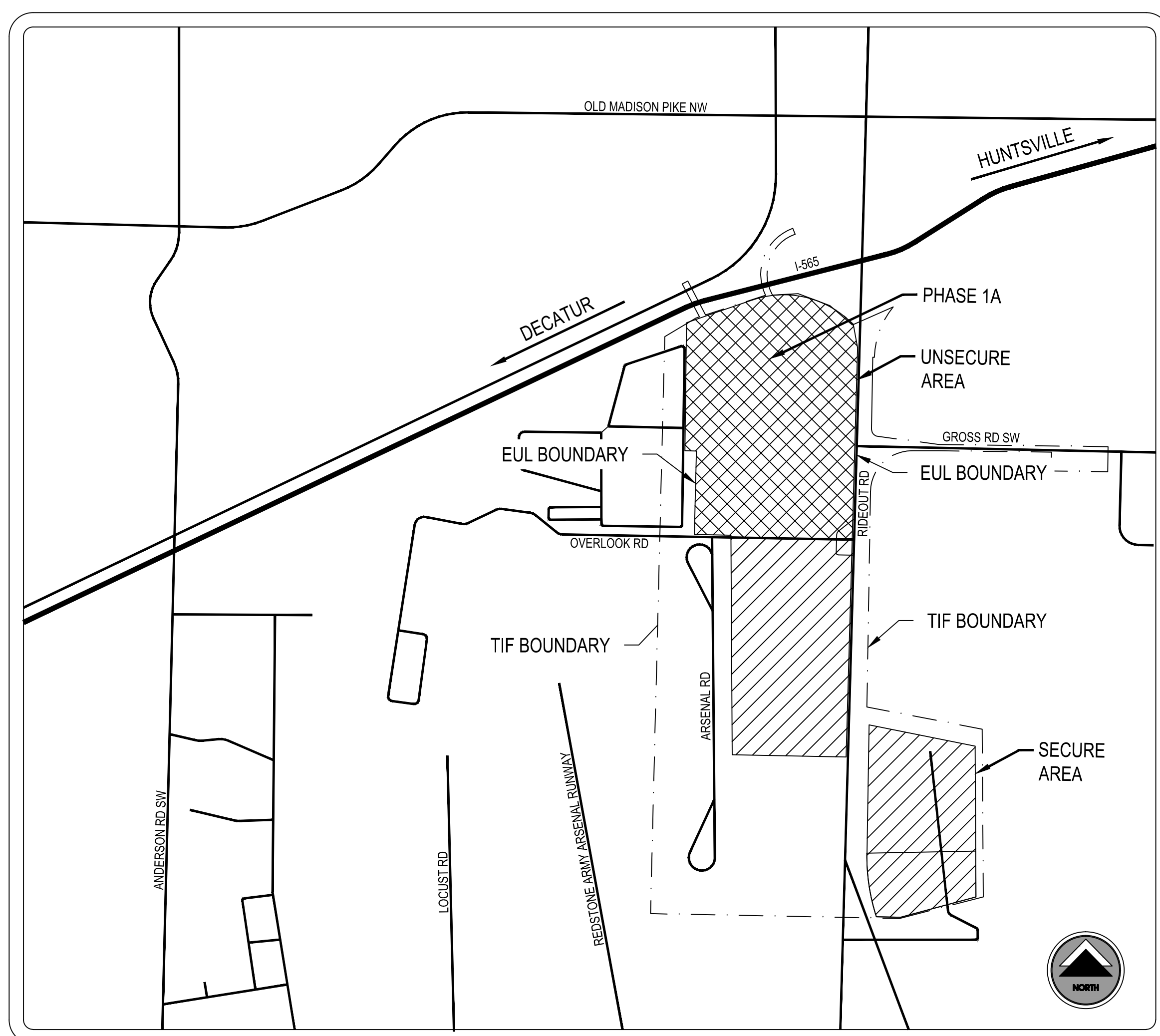


LBYD, INC. PROJECT NO. 302-10-002A  
CITY OF HUNTSVILLE PROJECT NO. 65-10-SP21

DECEMBER 16, 2010

NOTE:  
• FOR PLOTTING PURPOSES GRAY SHADES ARE PRESENT  
• FULL SIZE 36" X 48" SHEETS

### LOCATION MAP



### PROJECT TEAM

**OWNER:**  
CITY OF HUNTSVILLE  
322 FOUNTAIN CIRCLE  
HUNTSVILLE, AL 35801  
PHONE: (256) 427-5300  
CONTACT: SHANE DAVIS, PE  
EMAIL: SHANE.DAVIS@HUNTSVILLEAL.GOV  
CONTACT: RON ADAMS, PE  
EMAIL: RON.ADAMS@HUNTSVILLEAL.GOV  
CONTACT: CHRIS MCNEESE, PE  
EMAIL: CHRISTOPHER.MCNEESE@HUNTSVILLEAL.GOV

**DEVELOPER:**  
LW REDSTONE, LLC  
305 CHURCH STREET SW  
SUITE 719  
HUNTSVILLE, AL 35801  
CONTACT: GREG HALL  
PHONE: (404) 578-4501  
EMAIL: GREG.HALL@COPT.COM

**CIVIL ENGINEER:**  
LBYD, INC.  
305 CHURCH STREET SW  
SUITE 719  
HUNTSVILLE, AL 35801  
MAIN: (256) 533-1575  
CONTACT: TIM ROBERTS, PE  
PHONE: (256) 533-1575  
EMAIL: TIMROBERTS@LBYD.COM  
CONTACT: RICK NAIL, PE  
PHONE: (256) 488-0238  
EMAIL: RICK.NAIL@LBYD.COM  
CONTACT: BRIAN HATCHER, PE  
PHONE: (256) 488-4601  
EMAIL: BHATCHER@LBYD.COM

**PROJECT MANAGER:**  
BRASFIELD AND GORRIE L.L.C.  
3021 7TH AVENUE SOUTH  
BIRMINGHAM, AL 35203  
MAIN: (205) 328-4000  
CONTACT: MATT KELLEY  
PHONE: (205) 714-1322  
EMAIL: MKELLEY@BRASFIELDGORRIE.COM  
CONTACT: BRENT JONES  
PHONE: (205) 714-1038  
EMAIL: BRJONES@BRASFIELDGORRIE.COM

**TRAFFIC CONSULTANT:**  
SKIPPER CONSULTING, INC.  
344 VANN ROAD  
SUITE 100  
BIRMINGHAM, AL 35205  
MAIN: (205) 656-8855  
CONTACT: DARREL SKIPPER, PE  
EMAIL: DARRELL@SKIPPERINC.COM  
CONTACT: CODY LONG, PE  
EMAIL: CODY@SKIPPERINC.COM

**GEOTECHNICAL ENGINEER:**  
BUILDING AND EARTH SCIENCES  
2017 LEEBMAN FERRY ROAD,  
SUITE 5  
HUNTSVILLE, AL 35801  
MAIN: (256) 715-0059  
CONTACT: DON BROWN, PE  
PHONE: (256) 536-4300  
EMAIL: DBROWN@BUILDINGANDEARTH.COM

**SURVEYOR:**  
BUSBIN ENGINEERING AND SURVEYING, INC.  
524 MERIDIAN STREET N  
HUNTSVILLE, AL 35801  
MAIN: (256) 533-1099  
CONTACT: CAREY BUSBIN, PE/PLS  
EMAIL: CAREYBUSBIN@BELLSOUTH.NET

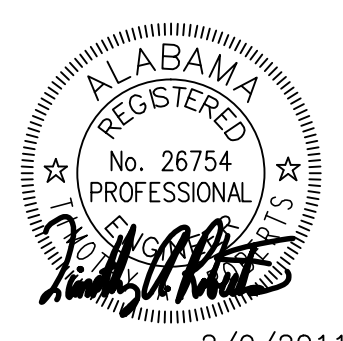
**LANDSCAPE ARCHITECT:**  
GREENVIEW STUDIO LANDSCAPE ARCHITECTURE  
PO BOX 260  
FAIRHOPE, AL 36533  
PHONE: (251) 823-7307  
CONTACT: LORI SHINDLEBOWER, LA  
EMAIL: LSHINDLE@GREENVIEWSTUDIO.COM

**REDSTONE GARRISON:**  
DIRECTORATE OF PUBLIC WORKS  
4488 MARTIN ROAD  
REDSTONE ARSENAL, AL 35898  
CONTACT: CRAIG NORTHRIDGE  
PHONE: (256) 955-8504  
EMAIL: CRAIG.NORTHRIDGE@US.ARMY.MIL

### DRAWING INDEX

T1.0	COVER SHEET	A
C1.0	PROJECT GENERAL NOTES	
C2.0	OVERALL EXISTING CONDITIONS PLAN	
C3.0	OVERALL DEMOLITION PLAN	
C4.0	OVERALL LAYOUT PLAN	
C4.1	LAYOUT AND COORDINATE PLAN	
C4.2	LAYOUT AND COORDINATE PLAN	
C4.3	LAYOUT AND COORDINATE PLAN	
C4.4	LAYOUT AND COORDINATE PLAN	
C4.5	VISITOR CENTER ACCESS PLAN	
C4.6	TRAFFIC LOGISTICS PLAN	
C4.7	STRIPING AND SIGNAGE PLAN	
C4.8	FENCING PLAN	
C5.0	BOULEVARD "A" - TYPICAL SECTIONS	
C5.1	BOULEVARD "A" - PLAN AND PROFILE (STA 0+00 TO 20+00)	
C5.2	BOULEVARD "A" - PLAN AND PROFILE (STA 20+00 TO 41+00)	
C5.3	VISITOR CENTER ACCESS DRIVE - PLAN AND PROFILE (STA 0+00 TO END)	
C6.0	OVERALL MASS GRADING AND STORM DRAINAGE PLAN	
C6.1	MASS GRADING AND STORM DRAINAGE PLAN	
C6.2	MASS GRADING AND STORM DRAINAGE PLAN	
C6.3	MASS GRADING AND STORM DRAINAGE PLAN	
C6.4	MASS GRADING AND STORM DRAINAGE PLAN	
C6.5	MASS GRADING COMPACTION PLAN	
C7.0	OVERALL UTILITY PLAN	
C7.1	UTILITY PLAN	B
C8.0	EROSION CONTROL PLAN - PRE CLEARING PHASE	
C8.1	EROSION CONTROL PLAN - INITIAL PHASE	
C8.2	EROSION CONTROL PLAN - INTERMEDIATE PHASE	
C8.3	EROSION CONTROL PLAN - FINAL PHASE	
C9.0	BOULEVARD "A" - CROSS SECTIONS (STA 0+00 TO 9+50)	
C9.1	BOULEVARD "A" - CROSS SECTIONS (STA 10+00 TO 19+50)	
C9.2	BOULEVARD "A" - CROSS SECTIONS (STA 20+00 TO 29+50)	
C9.3	BOULEVARD "A" - CROSS SECTIONS (STA 30+00 TO 39+50)	
C9.4	BOULEVARD "A" - CROSS SECTIONS (STA 40+00 TO 49+50)	
C10.0	STORM PROFILES	
C11.0	CIVIL DETAILS	
C11.1	CIVIL DETAILS	
C11.2	CIVIL DETAILS	
C11.3	CIVIL DETAILS	
C11.4	CIVIL DETAILS	
C11.5	CIVIL DETAILS	
C12.0	SURVEY	
SS1.0	SANITARY SEWER PLAN & PROFILE	A
SS2.0	CIVIL DETAILS	
SS3.0	CIVIL DETAILS	

  
CORPORATE OFFICE  
PROPERTIES TRUST



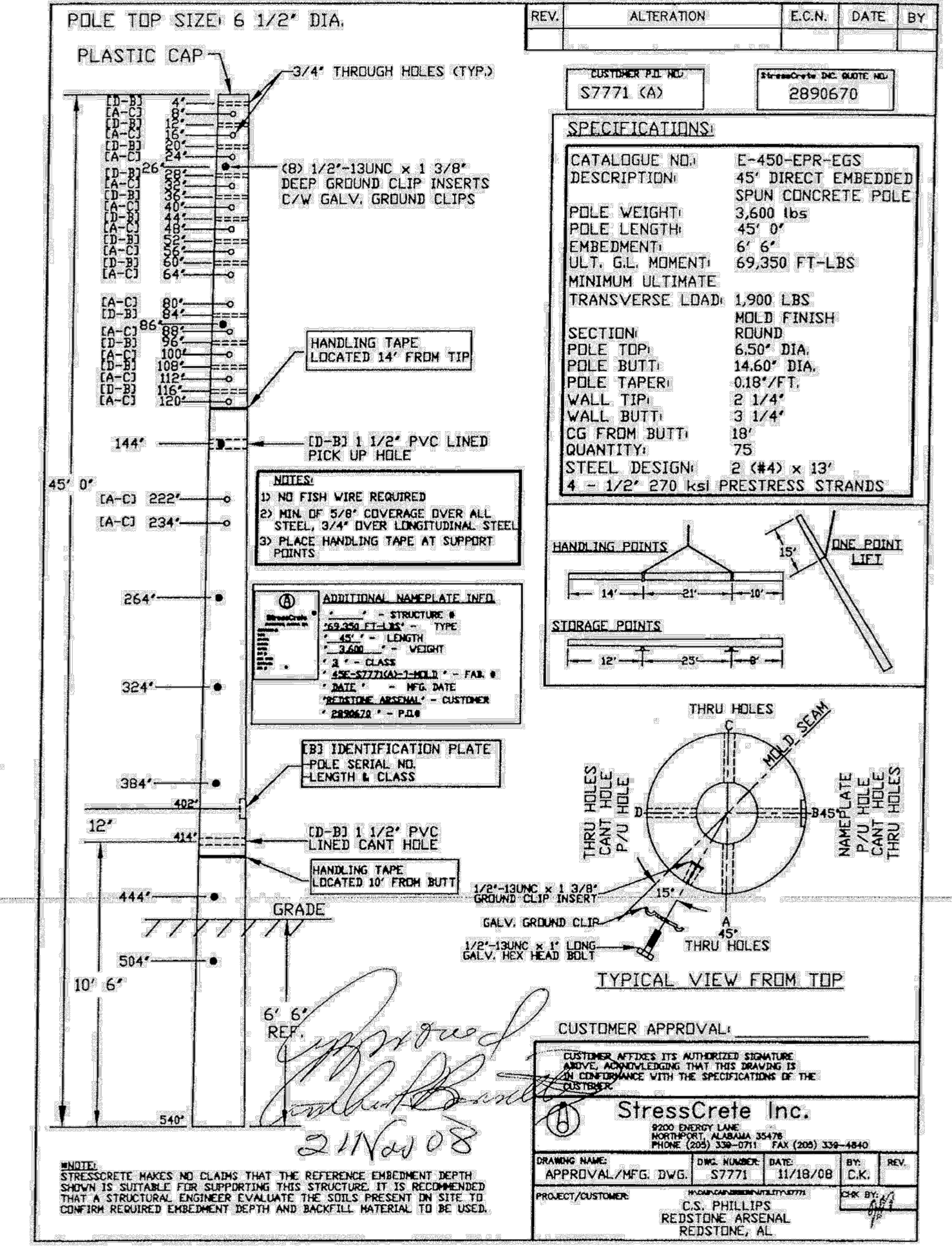
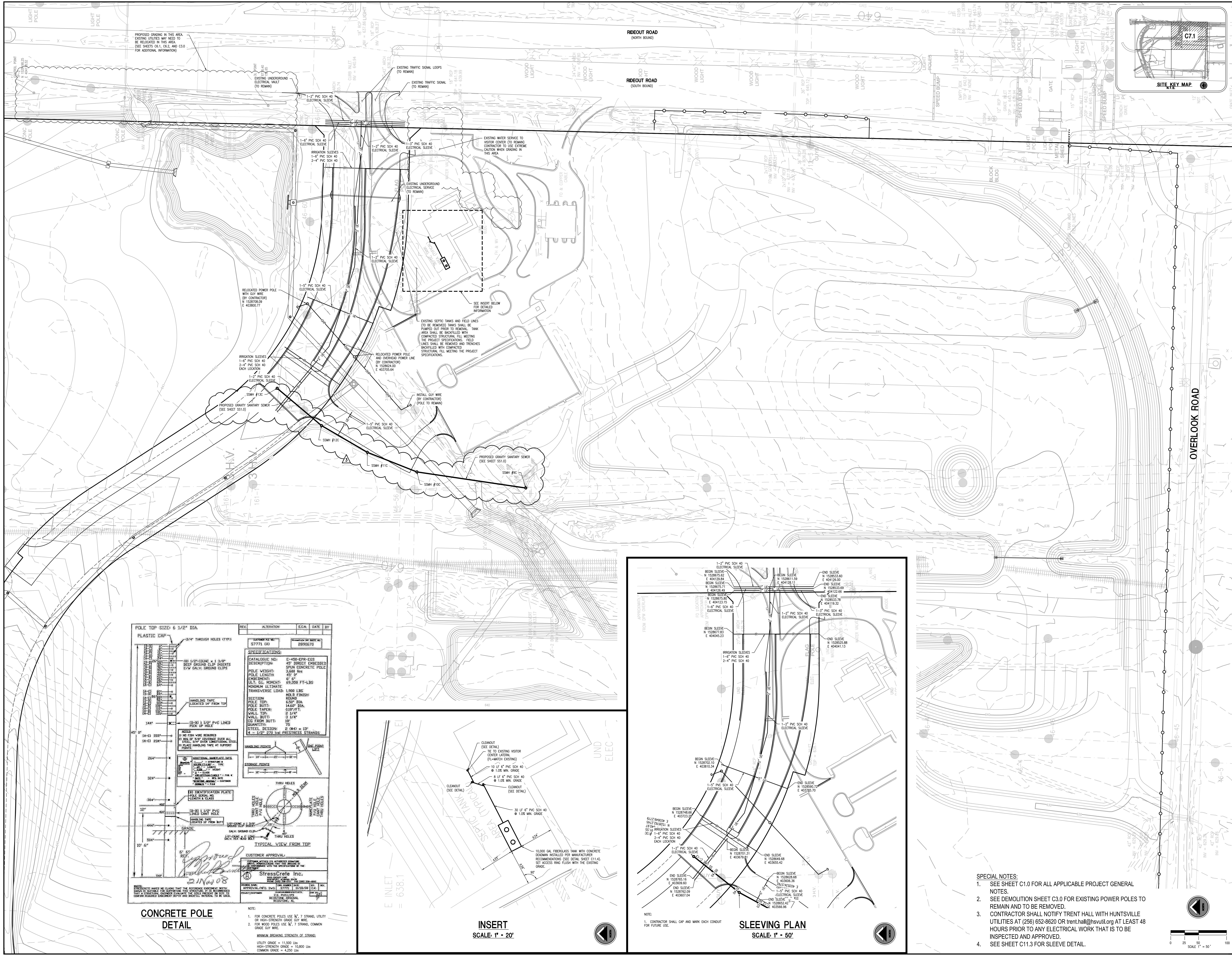
  
**LBYD**  
Civil and Structural  
Engineers  
Atlanta, Georgia  
Birmingham, Alabama  
Huntsville, Alabama  
www.lbyd.com

REVISION 3 - 2/9/2011





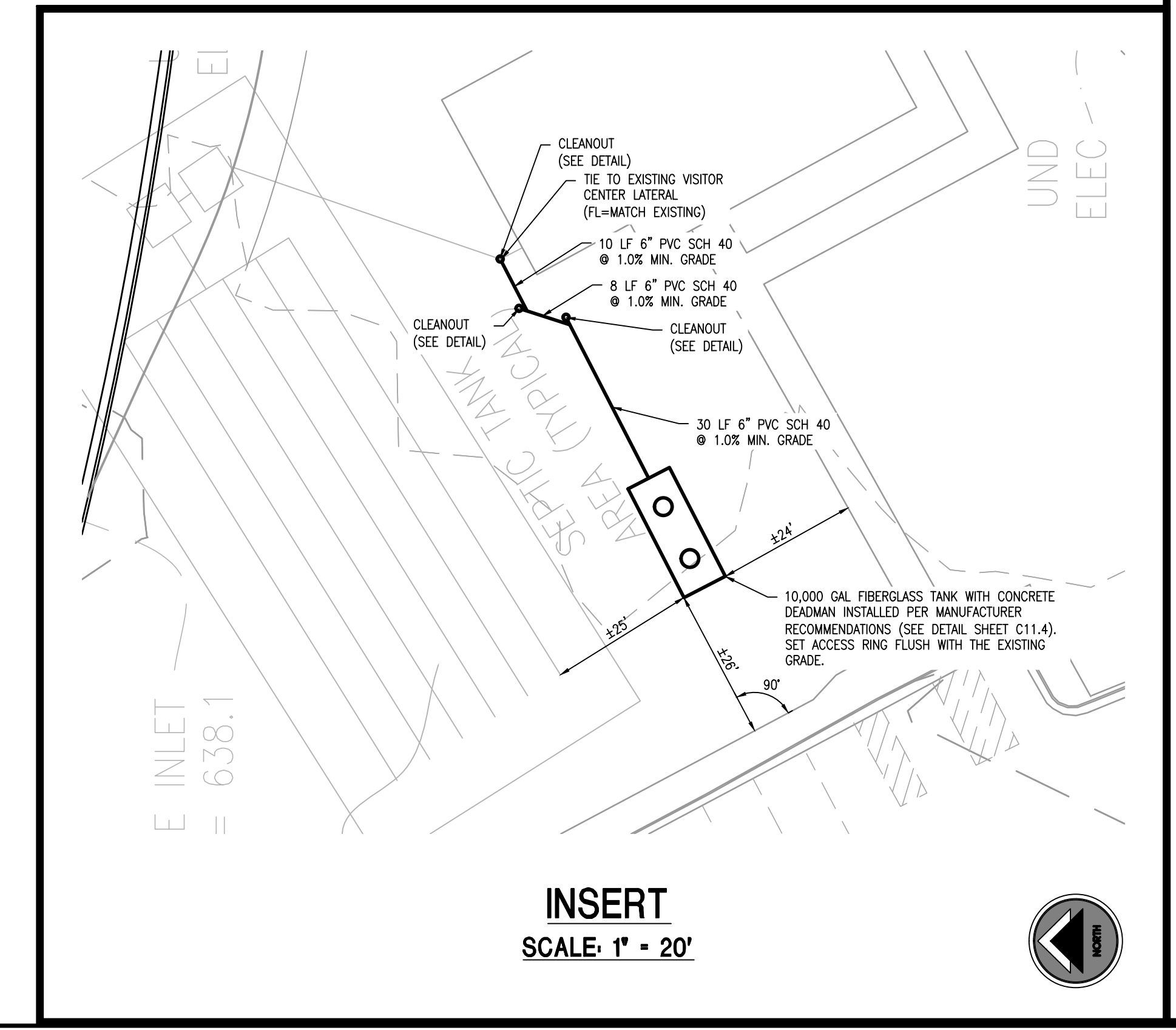




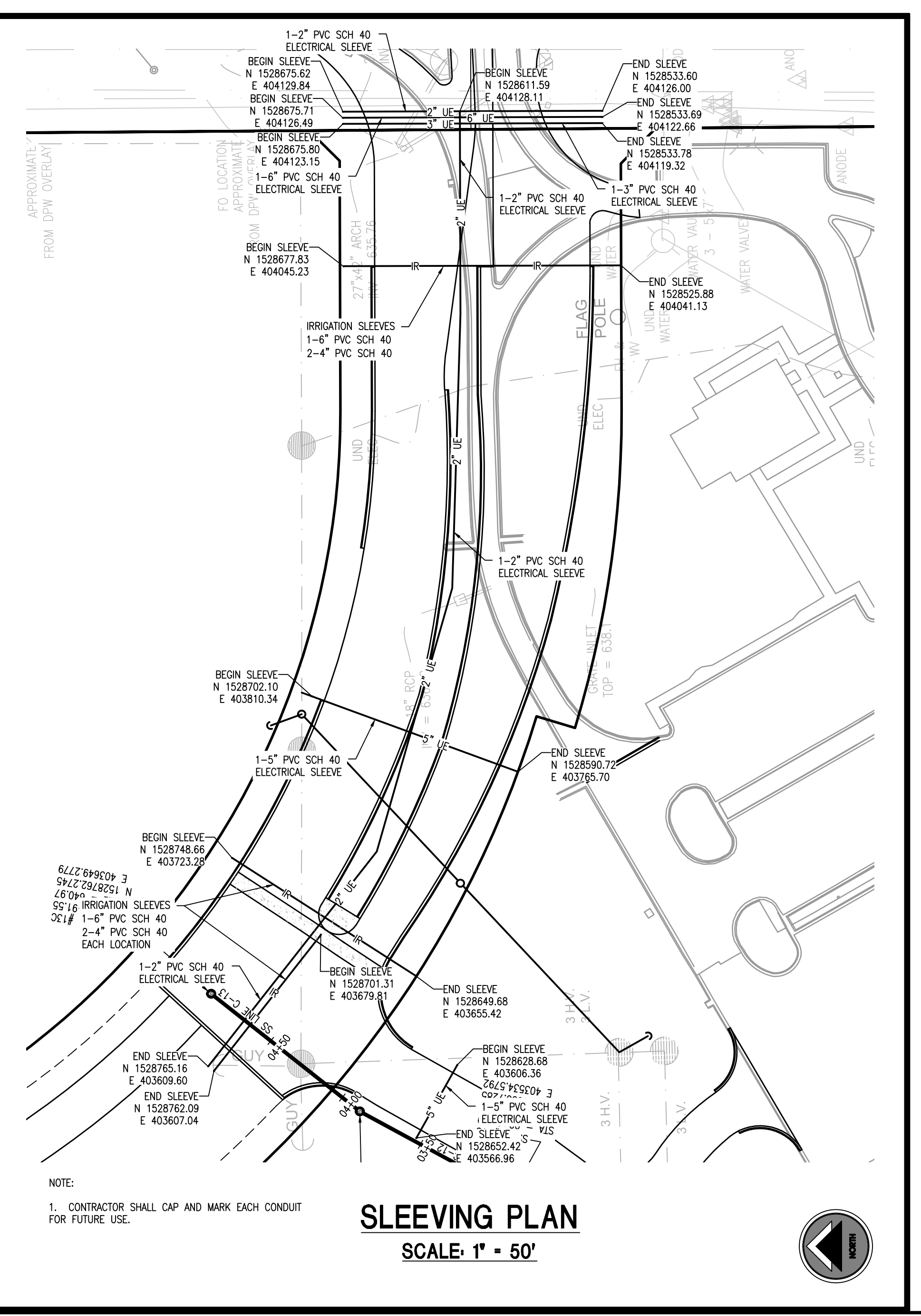
**CONCRETE POLE DETAIL**

1. FOR CONCRETE POLES USE NO. 7 STRAND, UTILITY OR HIGH-STRENGTH GRADE GUY WIRE.  
2. FOR WOOD POLES USE NO. 7 STRAND, COMMON GRADE GUY WIRE.

MINIMUM BENDING STRENGTH OF STRAND:  
UTILITY GRADE = 11,500 lbs  
HIGH-STRENGTH GRADE = 10,800 lbs  
COMMON GRADE = 4,250 lbs



**INSERT**  
SCALE: 1" = 20'



**SLEEVING PLAN**  
SCALE: 1" = 50'

- SPECIAL NOTES:**
- SEE SHEET C1.0 FOR ALL APPLICABLE PROJECT GENERAL NOTES.
  - SEE DEMOLITION SHEET C3.0 FOR EXISTING POWER POLES TO REMAIN AND TO BE REMOVED.
  - CONTRACTOR SHALL NOTIFY TRENT HALL WITH HUNTSVILLE UTILITIES AT (256) 652-8620 OR trent.hall@hsvutil.org AT LEAST 48 HOURS PRIOR TO ANY ELECTRICAL WORK THAT IS TO BE INSPECTED AND APPROVED.
  - SEE SHEET C11.3 FOR SLEEVE DETAIL.

**LBVD**  
Civil and Structural  
Engineers  
Atlanta, Georgia  
Birmingham, Alabama  
Huntsville, Alabama  
www.lbvd.com

1970 Project Number  
**302-10-002A**

**LBVD, Inc.**  
305 Church Street SW  
Suite 719  
Huntsville, AL 35801  
Phone (256) 533-1575  
Fax (256) 533-1744

2/9/2011

**HUNTSVILLE**  
The Best of Alabama

**UTILITY PLAN**  
**REDSTONE GATEWAY - PACKAGE 1A**  
**CITY OF HUNTSVILLE, ALABAMA**

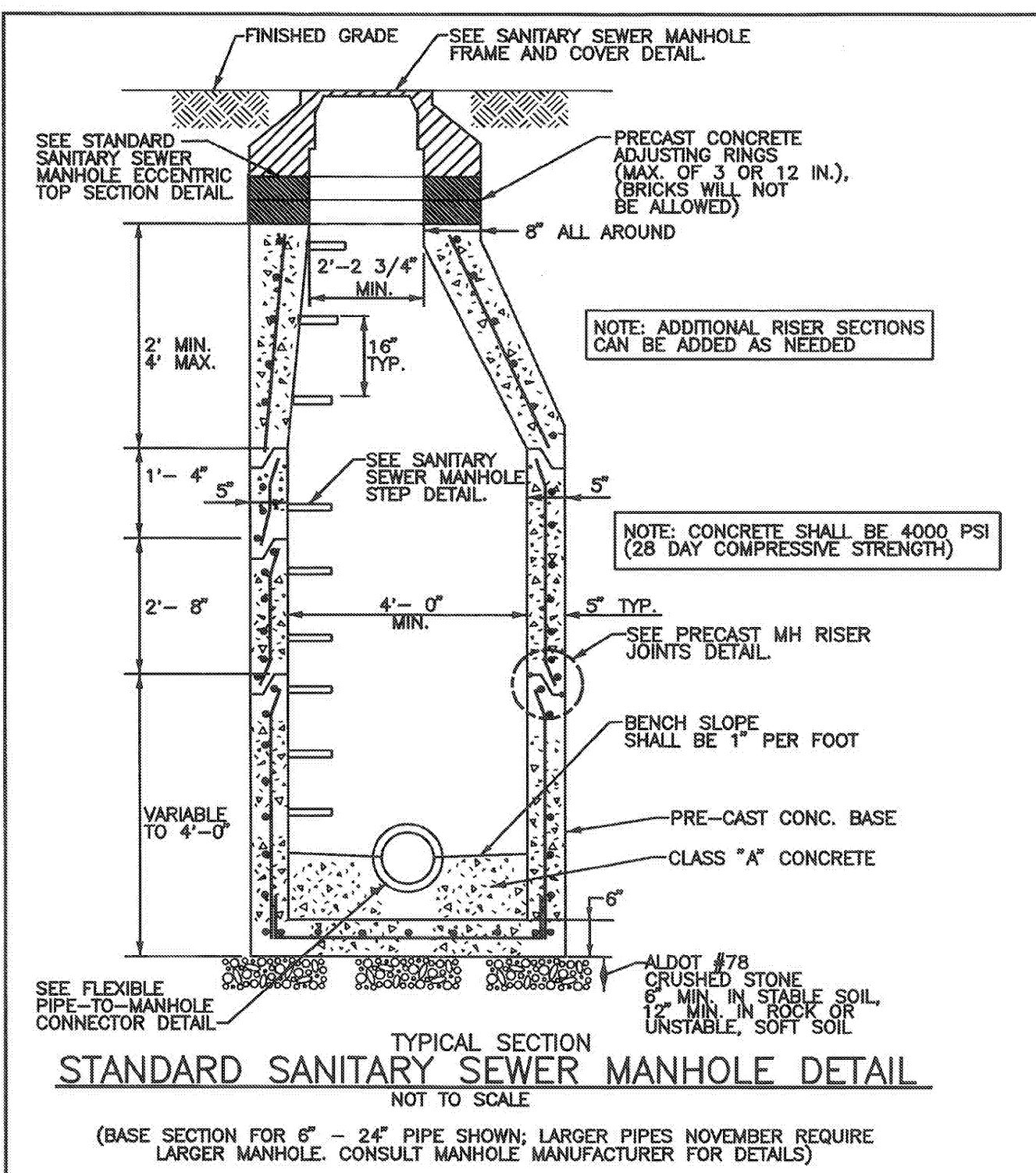
NO.	DATE	BY	CHKD	DESC
1	2/9/2011	BSJ		DESIGN
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

Drawn By: **BSJ**  
Checked By: **RAN**  
Scale: **C7.1**  
Sheet: **42**



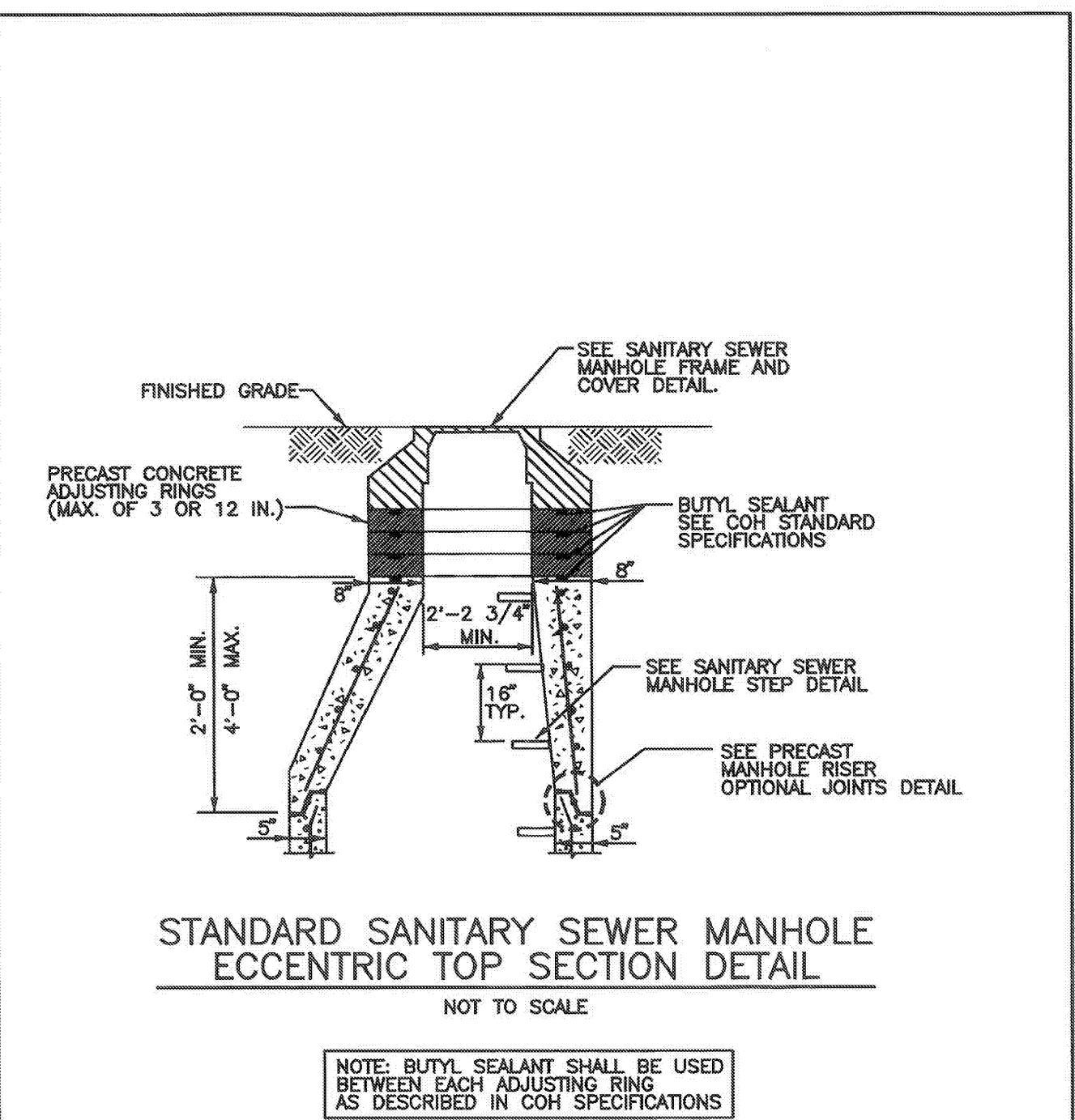






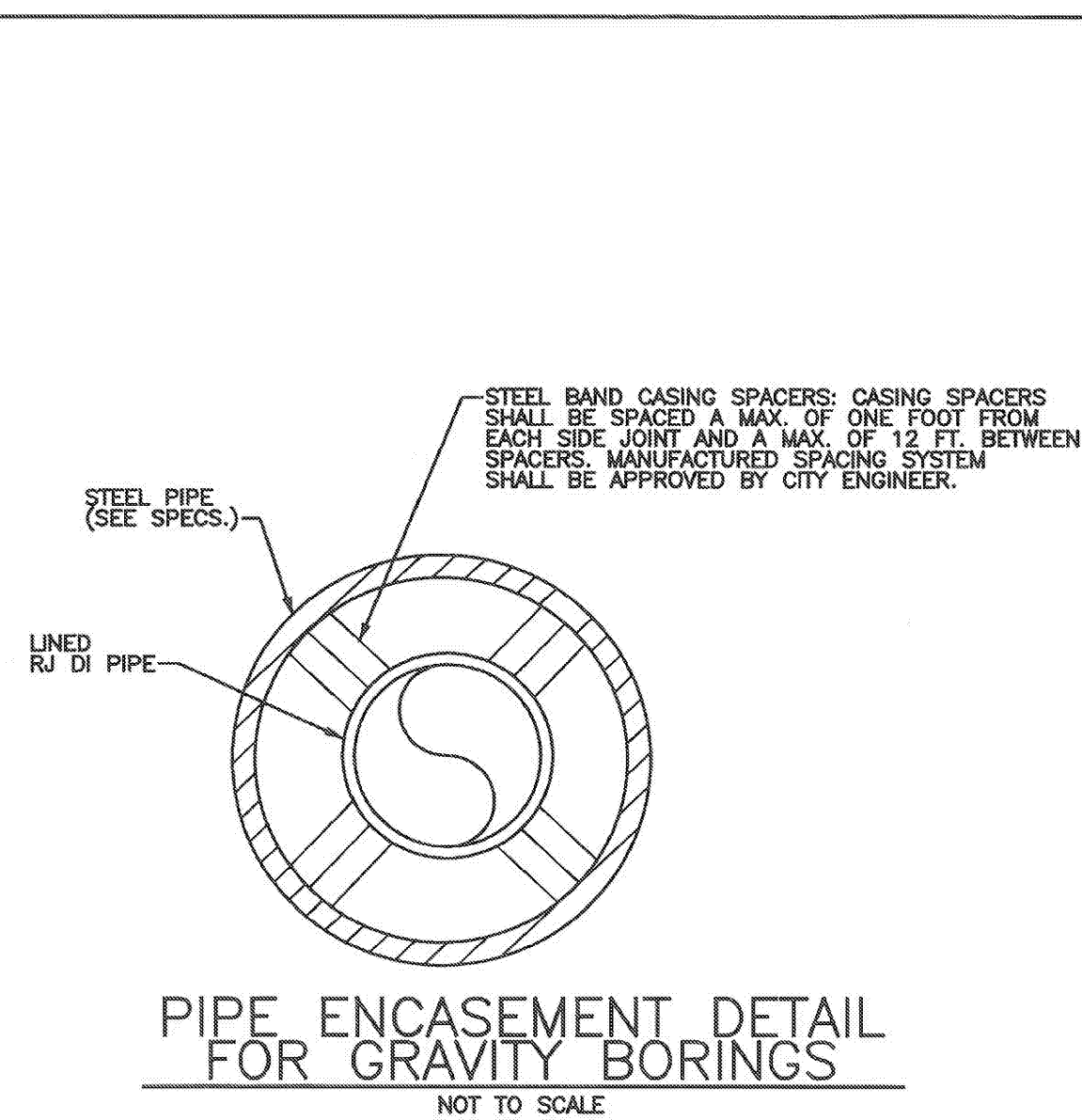
<b>CITY OF HUNTSVILLE</b>		
STANDARD SANITARY SEWER MANHOLE DETAIL		
CITY ENGINEERING DIVISION CITY OF HUNTSVILLE, ALABAMA	SD-1	

REVISED NOVEMBER 2005



<b>CITY OF HUNTSVILLE</b>		
STANDARD SANITARY SEWER MANHOLE ECCENTRIC TOP SECTION DETAIL		
CITY ENGINEERING DIVISION CITY OF HUNTSVILLE, ALABAMA	SD-2	

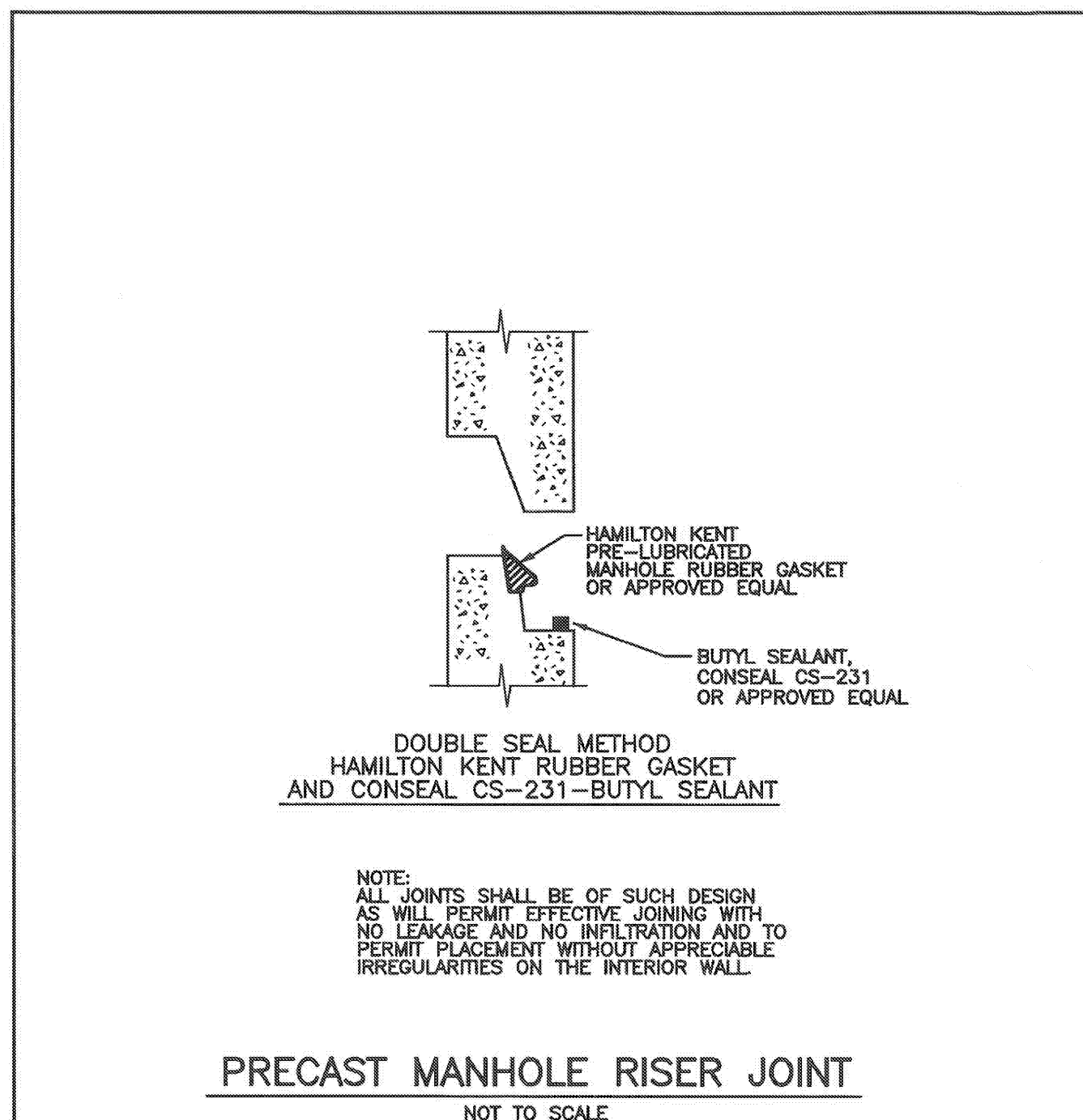
REVISED NOVEMBER 2005



- NOTES:
1. END SEALS SHALL BE USED AT EACH END OF BORING CASING AS SPECIFIED IN THE CITY OF HUNTSVILLE STANDARD SPECIFICATIONS, SECTION 645.

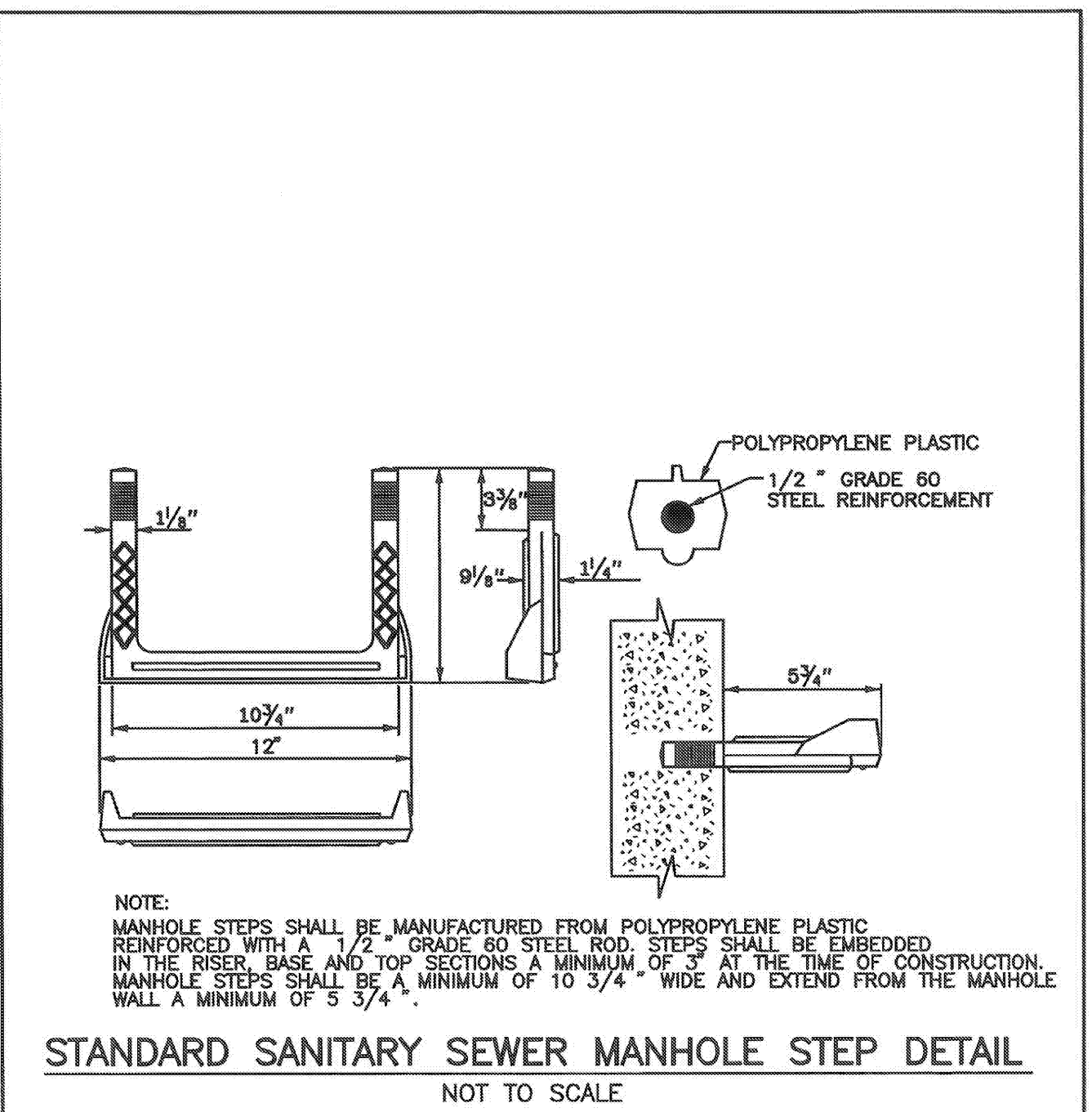
<b>CITY OF HUNTSVILLE</b>		
PIPE ENCASEMENT DETAIL FOR FORCEMAIN BORINGS		
CITY ENGINEERING DIVISION CITY OF HUNTSVILLE, ALABAMA	SD-17	

REVISED NOVEMBER 2005



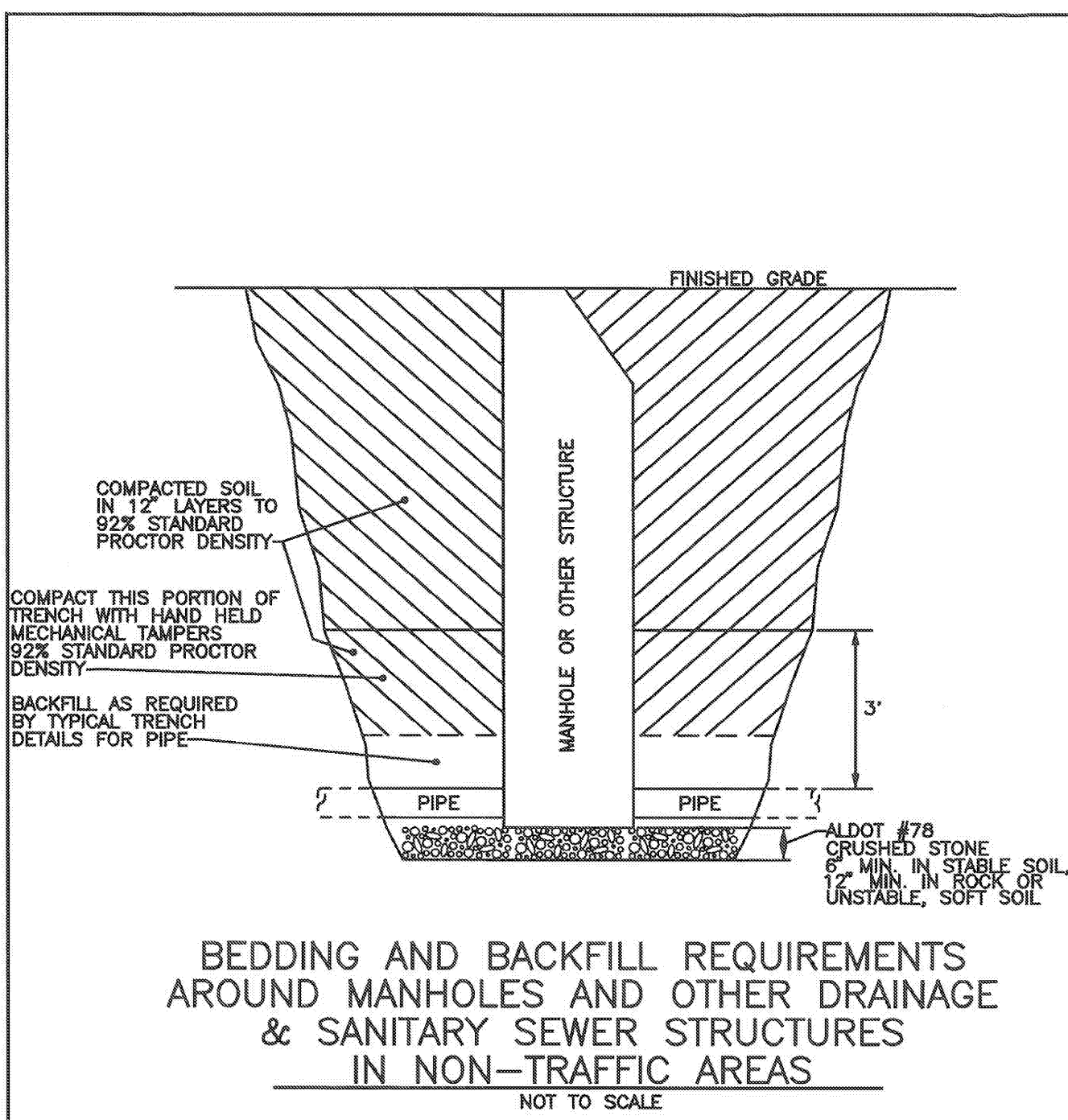
<b>CITY OF HUNTSVILLE</b>		
PRECAST MANHOLE RISER JOINT		
CITY ENGINEERING DIVISION CITY OF HUNTSVILLE, ALABAMA	SD-5	

REVISED NOVEMBER 2005



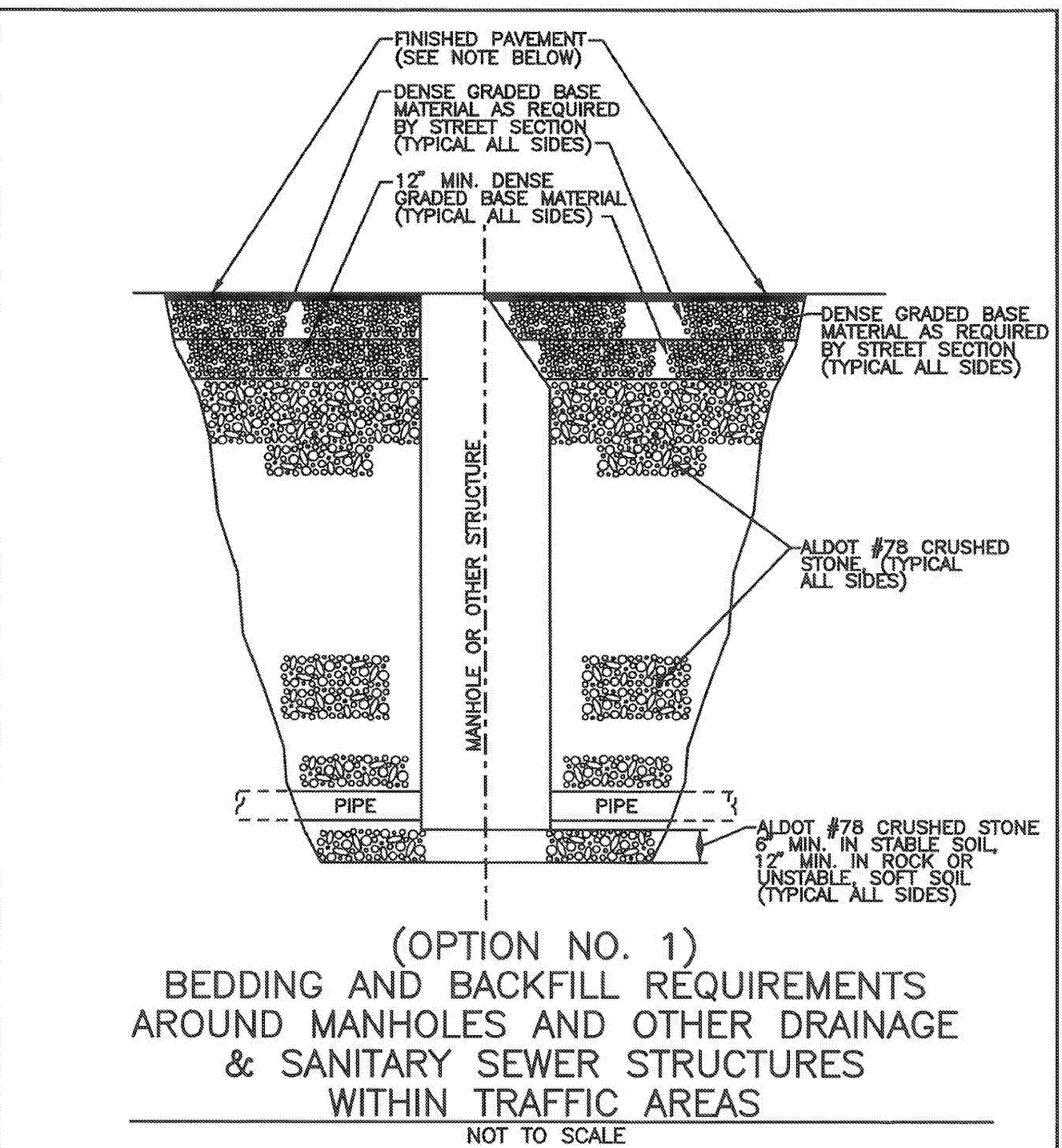
<b>CITY OF HUNTSVILLE</b>		
STANDARD SANITARY SEWER MANHOLE STEP DETAIL		
CITY ENGINEERING DIVISION CITY OF HUNTSVILLE, ALABAMA	SD-6	

REVISED NOVEMBER 2005



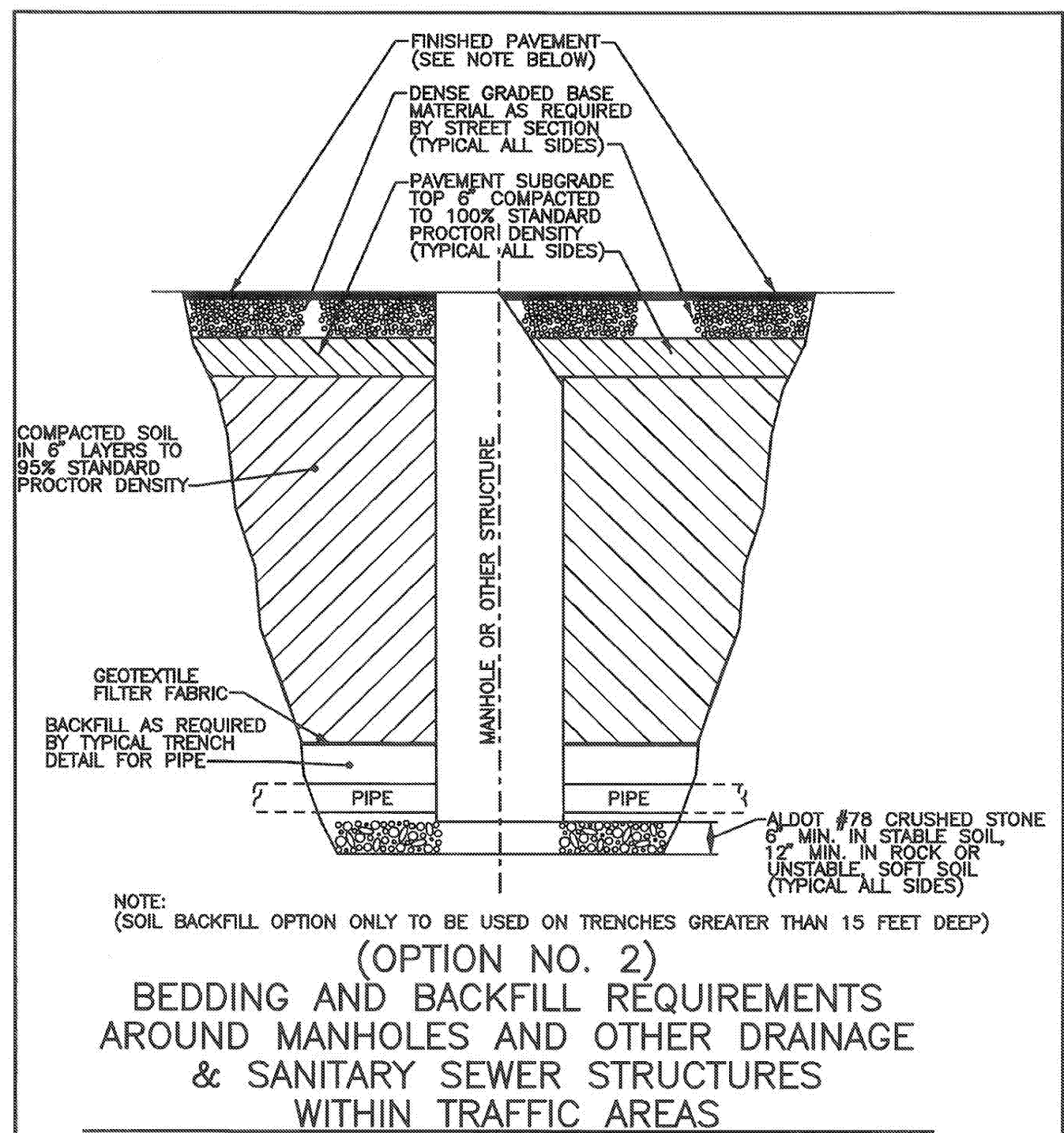
<b>CITY OF HUNTSVILLE</b>		
BEDDING AND BACKFILL REQUIREMENTS AROUND MANHOLES IN NON-TRAFFIC AREAS		
CITY ENGINEERING DIVISION CITY OF HUNTSVILLE, ALABAMA	SD-9	

REVISED NOVEMBER 2005



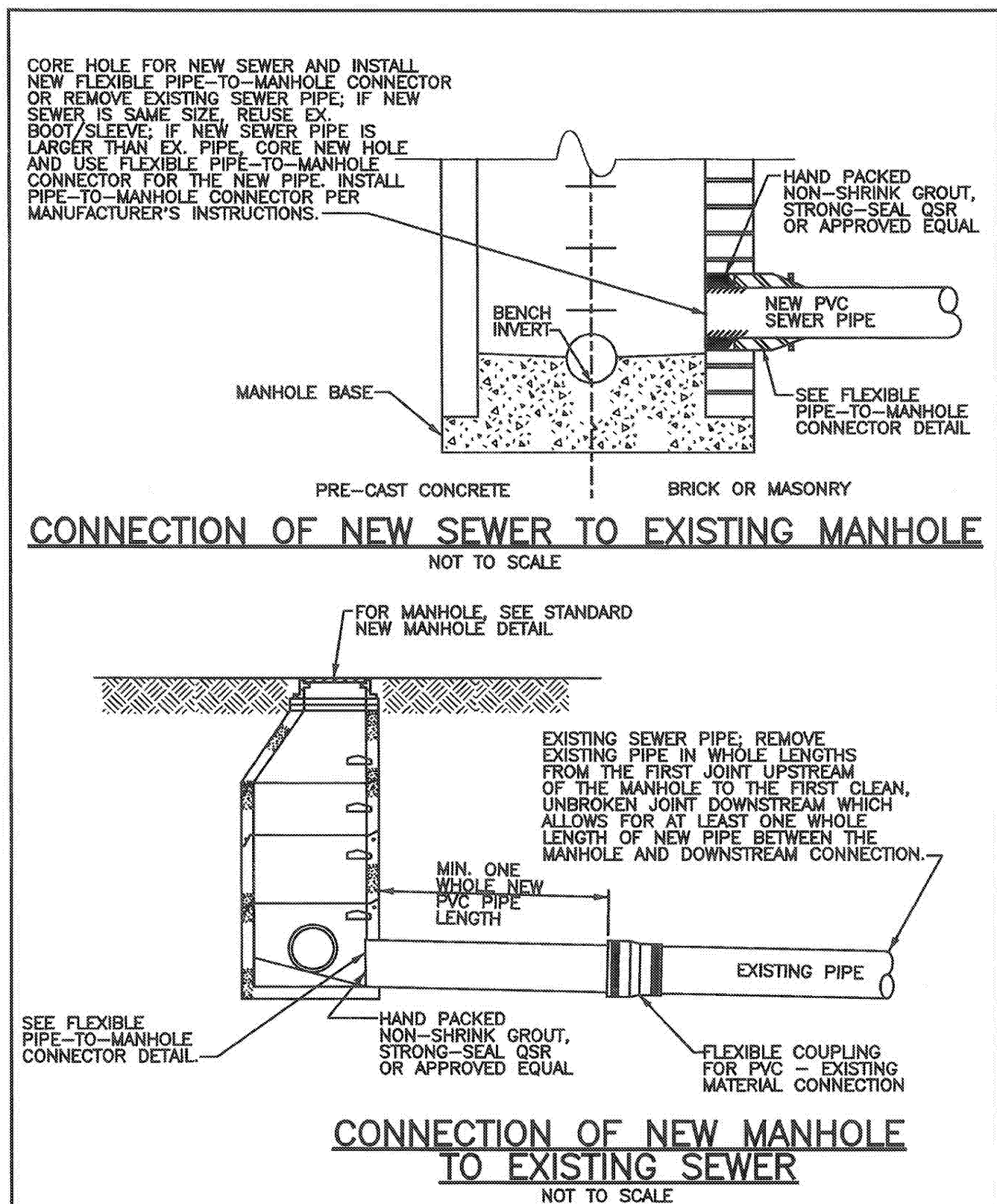
<b>CITY OF HUNTSVILLE</b>		
OPTION NO. 1 BEDDING AND BACKFILL REQUIREMENTS AROUND MANHOLES IN TRAFFIC AREAS		
CITY ENGINEERING DIVISION CITY OF HUNTSVILLE, ALABAMA	SD-10A	

REVISED NOVEMBER 2005



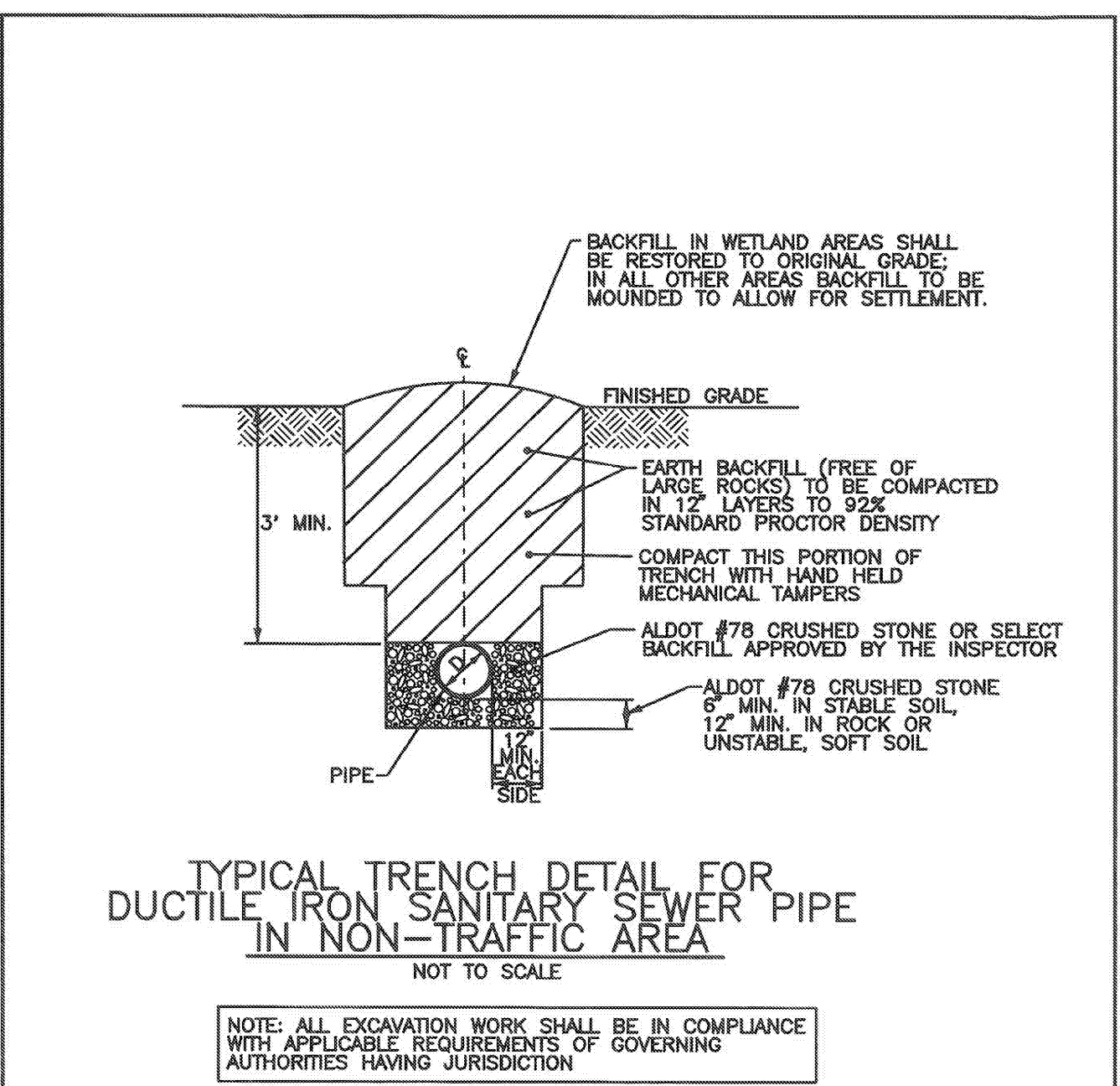
<b>CITY OF HUNTSVILLE</b>		
OPTION NO. 2 BEDDING AND BACKFILL REQUIREMENTS AROUND MANHOLES IN TRAFFIC AREAS		
CITY ENGINEERING DIVISION CITY OF HUNTSVILLE, ALABAMA	SD-10B	

REVISED NOVEMBER 2005



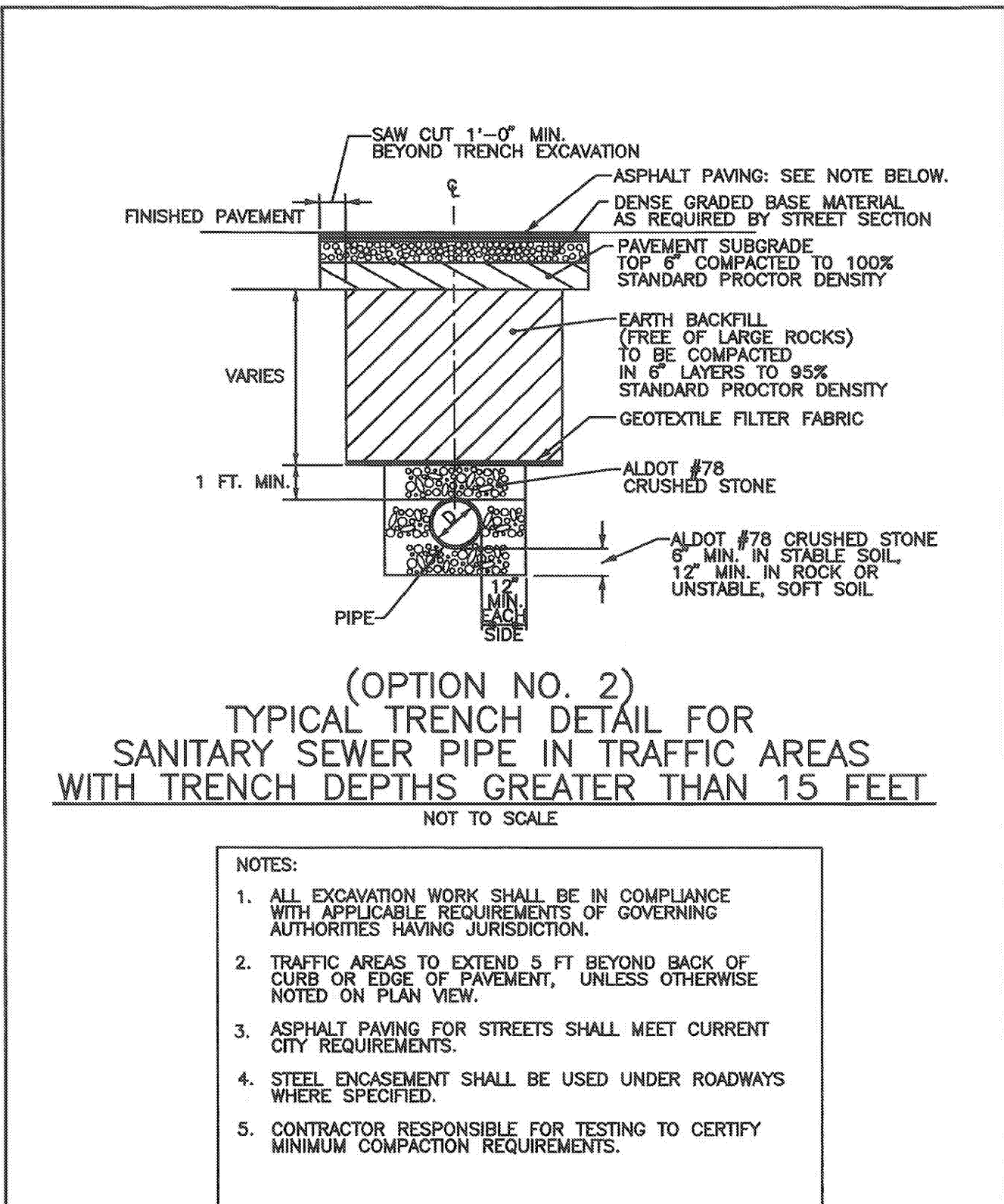
<b>CITY OF HUNTSVILLE</b>		
NEW MANHOLE CONNECTION DETAIL		
CITY ENGINEERING DIVISION CITY OF HUNTSVILLE, ALABAMA	SD-11	

REVISED NOVEMBER 2005



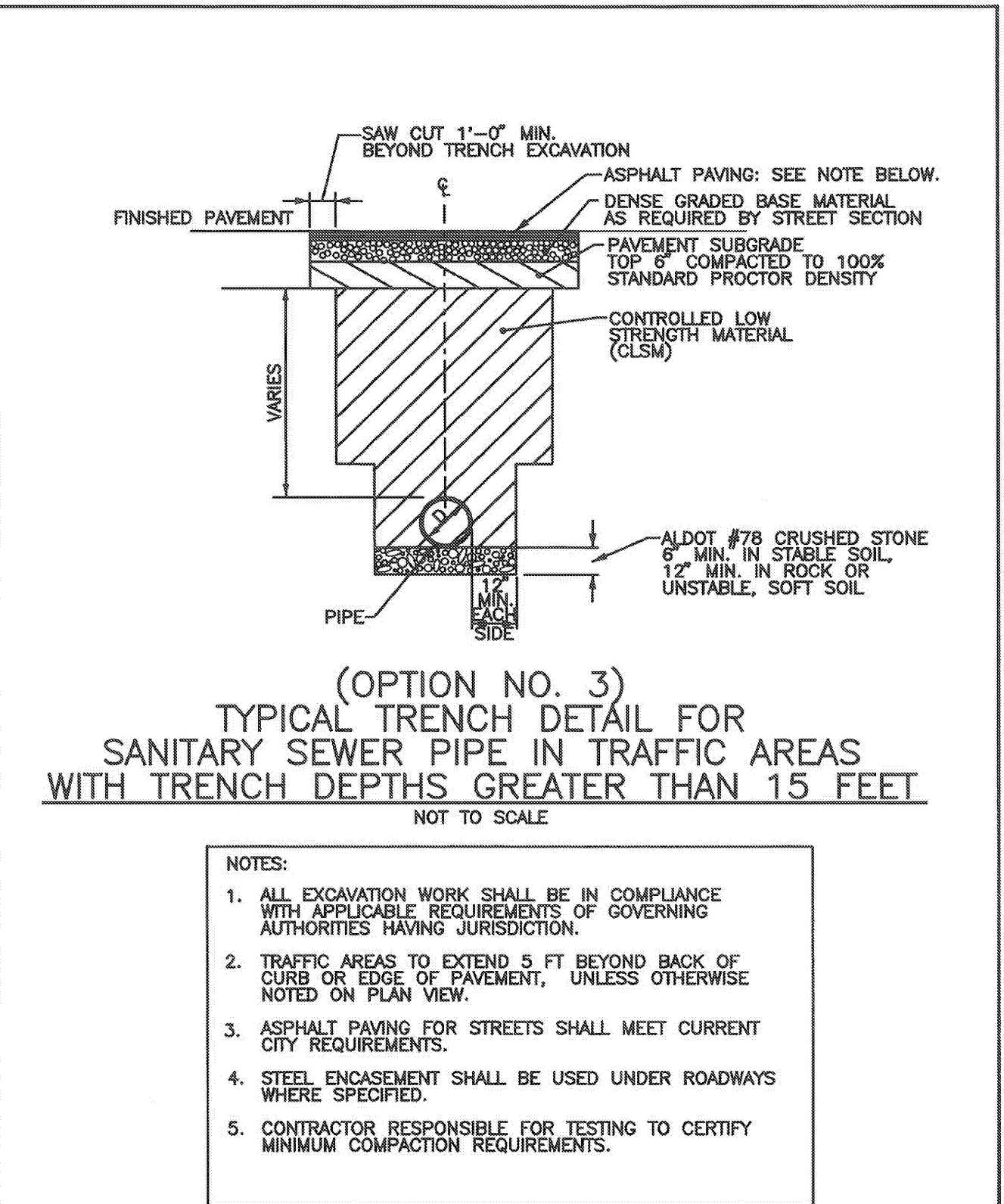
<b>CITY OF HUNTSVILLE</b>		
TYPICAL TRENCH DETAIL FOR PIPE IN NON-TRAFFIC AREAS		
CITY ENGINEERING DIVISION CITY OF HUNTSVILLE, ALABAMA	SD-14A	

REVISED NOVEMBER 2005



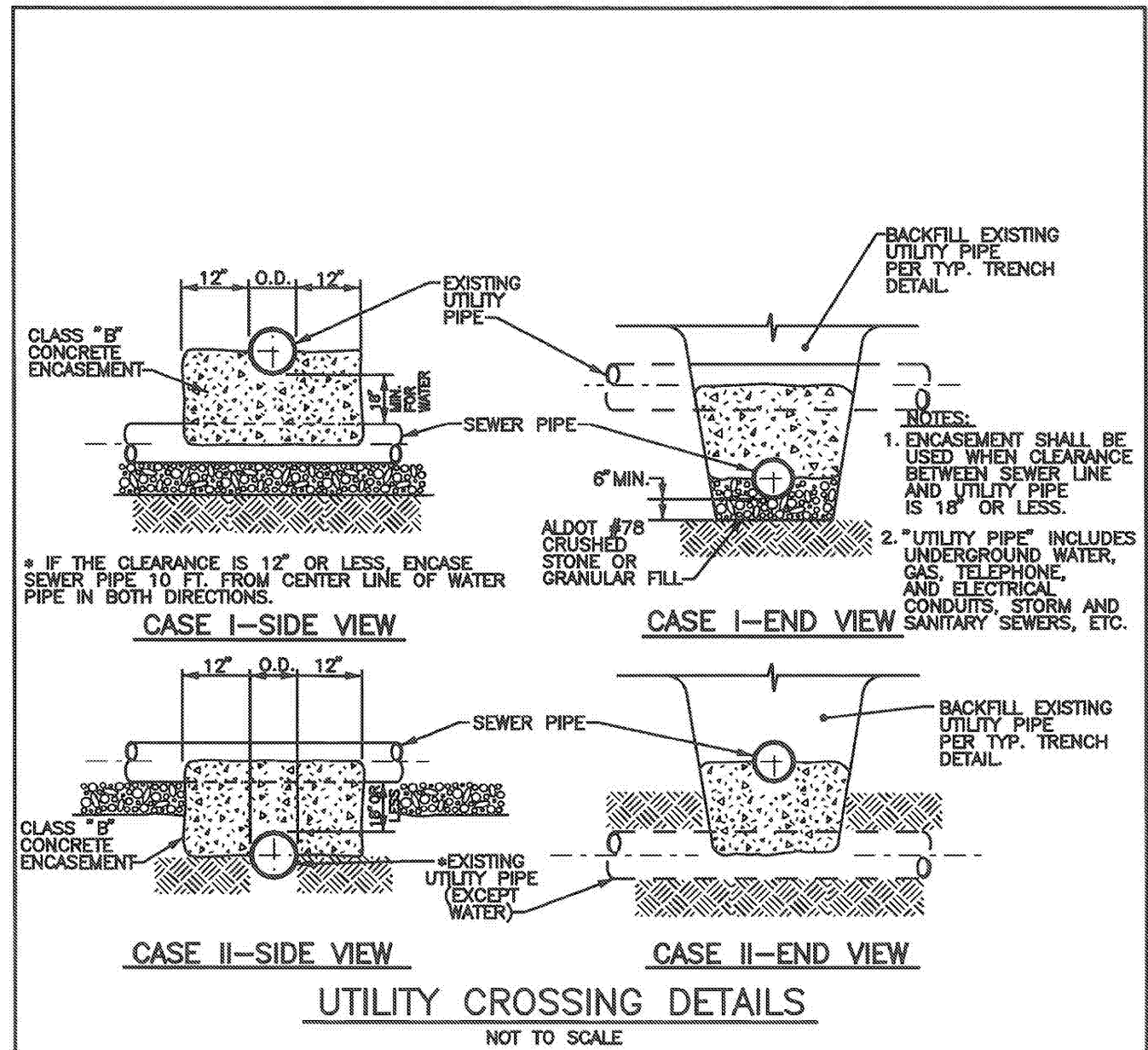
<b>CITY OF HUNTSVILLE</b>		
OPTION NO. 2 TYPICAL TRENCH DETAILS FOR PIPE IN TRAFFIC AREAS		
CITY ENGINEERING DIVISION CITY OF HUNTSVILLE, ALABAMA	SD-15B	

REVISED NOVEMBER 2005



<b>CITY OF HUNTSVILLE</b>		
OPTION NO. 3 TYPICAL TRENCH DETAILS FOR PIPE IN TRAFFIC AREAS		
CITY ENGINEERING DIVISION CITY OF HUNTSVILLE, ALABAMA	SD-15C	

REVISED NOVEMBER 2005



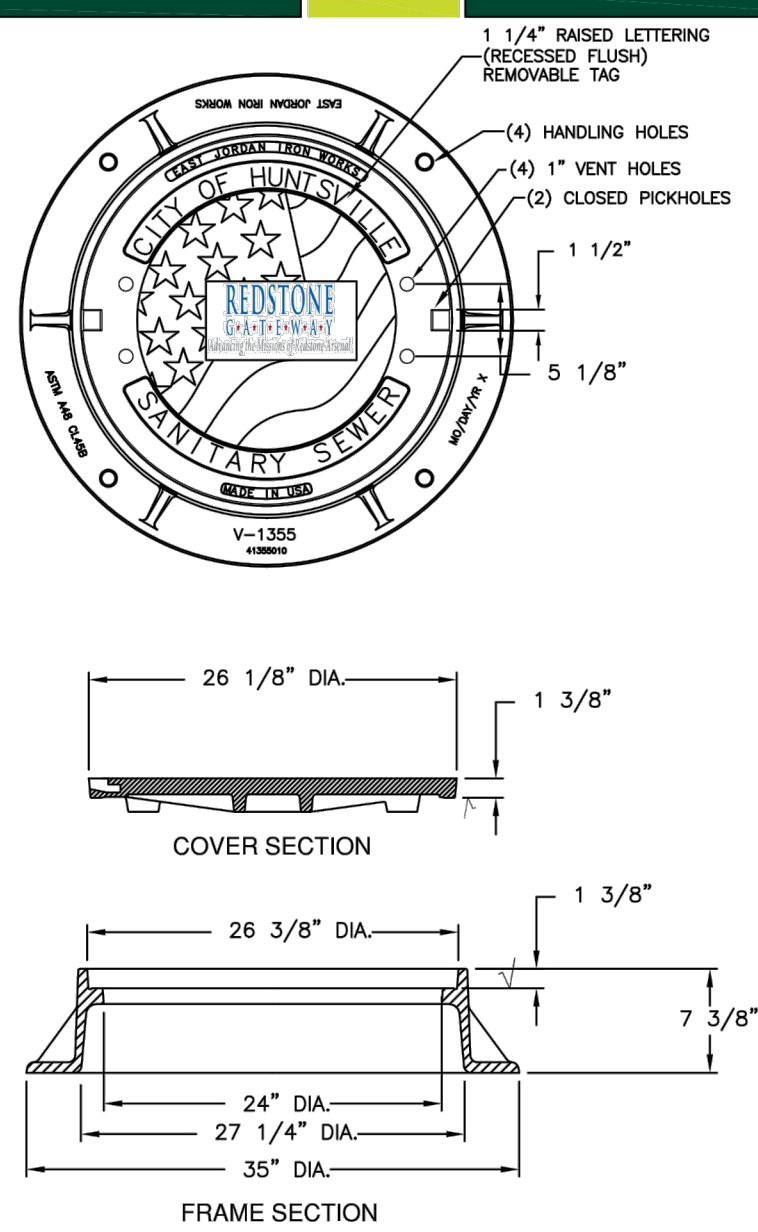
<b>CITY OF HUNTSVILLE</b>		
UTILITY CROSSING DETAILS		
CITY ENGINEERING DIVISION CITY OF HUNTSVILLE, ALABAMA	SD-16	

REVISED NOVEMBER 2005

REV	DATE	DESCRIPTION	BY	CHKD	APP'D
1	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
2	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
3	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
4	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
5	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
6	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
7	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
8	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
9	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
10	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
11	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
12	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
13	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
14	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
15	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
16	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
17	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
18	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
19	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
20	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
21	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
22	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
23	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
24	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
25	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
26	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
27	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
28	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
29	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
30	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
31	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
32	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
33	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
34	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
35	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
36	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
37	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
38	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
39	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
40	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
41	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
42	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
43	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
44	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
45	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
46	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
47	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
48	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
49	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
50	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
51	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
52	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
53	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
54	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
55	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
56	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
57	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
58	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
59	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
60	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
61	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
62	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
63	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
64	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
65	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
66	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
67	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
68	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
69	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
70	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
71	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
72	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
73	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
74	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
75	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
76	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
77	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
78	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
79	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
80	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
81	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
82	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
83	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
84	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
85	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
86	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
87	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
88	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
89	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
90	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
91	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
92	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
93	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
94	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
95	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
96	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
97	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
98	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
99	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD
100	12/10/05	ISSUED FOR PERMIT	LBVD	LBVD	LBVD



V-1355 ASSEMBLY



Corporate Headquarters  
301 Spring Street  
PO Box 459  
East Jordan, MI 49724-0459  
800.874.4100

**EAST JORDAN**

Copyright ©, 2009 East Jordan Iron Works, Inc. and its subsidiaries. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without prior written permission from East Jordan Iron Works, Inc.

1 1/4" RAISED LETTERING (RECESSED FLUSH) REMOVABLE TAG

(4) HANGING HOLES

(4) 1" VENT HOLES

(2) CLOSED PICKHOLES

1 1/2"

5 1/8"

26 1/8" DIA.

1 3/8"

COVER SECTION

26 3/8" DIA.

1 3/8"

24" DIA.

27 1/4" DIA.

30" DIA.

7 3/8"

FRAME SECTION

PRODUCT NUMBER  
**NPR10-28991**

DESIGN FEATURES

MATERIALS  
COVER: GRAY IRON  
ASTM A48 CLASS B  
FRAME: GRAY IRON  
ASTM A48 CLASS B

DESIGN LOAD  
HEAVY DUTY

COATING  
UNPAINTED

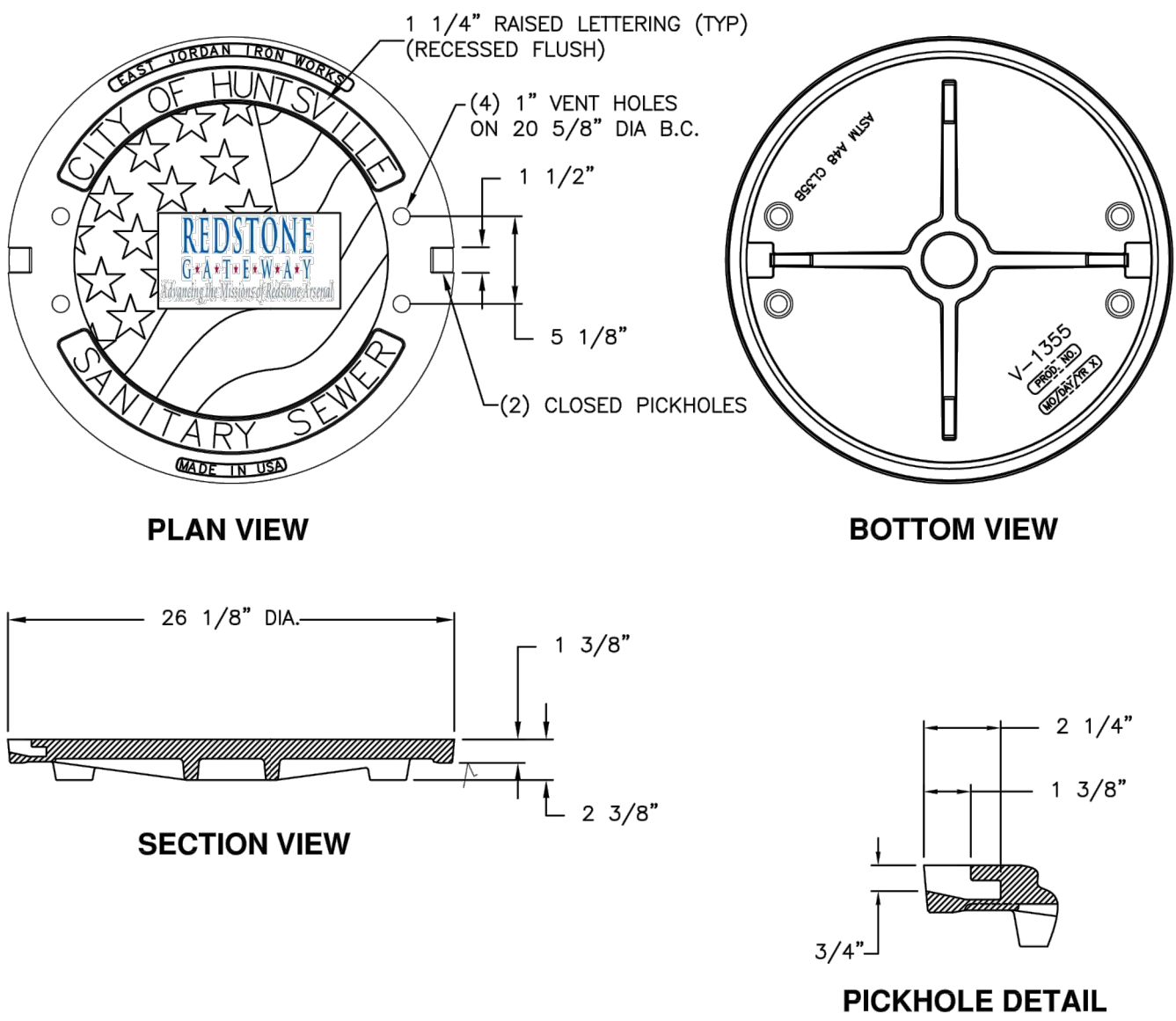
OPEN AREA  
N/A

✓ DESIGNATES MACHINE SURFACE

REFERENCE INFORMATION  
NPR10-2899K

DRAWING DETAILS  
ORIGINAL DRAWING: 3MM 01/04/11  
REVISED BY:

V-1355 COVER



Corporate Headquarters  
301 Spring Street  
PO Box 459  
East Jordan, MI 49724-0459  
800.874.4100

**EAST JORDAN**

Copyright ©, 2009 East Jordan Iron Works, Inc. and its subsidiaries. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without prior written permission from East Jordan Iron Works, Inc.

1 1/4" RAISED LETTERING (TYP) (RECESSED FLUSH)

(4) 1" VENT HOLES ON 20 9/16" DIA. B.C.

(2) CLOSED PICKHOLES

1 1/2"

5 1/8"

26 1/8" DIA.

1 3/8"

2 3/8"

SECTION VIEW

2 1/4"

1 3/8"

PICKHOLE DETAIL

3/4"

PRODUCT NUMBER  
**NPR10-2899K**

DESIGN FEATURES

MATERIALS  
COVER: GRAY IRON  
ASTM A48 CLASS B  
FRAME: GRAY IRON  
ASTM A48 CLASS B

DESIGN LOAD  
HEAVY DUTY

COATING  
UNPAINTED

OPEN AREA  
N/A

✓ DESIGNATES MACHINED SURFACE

DRAWING DETAILS  
ORIGINAL DRAWING: 3MM 01/04/11  
REVISED BY:

**LBVD**  
Civil and Structural Engineers  
Atlanta, Georgia  
Birmingham, Alabama  
Huntsville, Alabama  
www.lbvd.com

LBVD Project Number  
**302-10-002A**

**LBVD, Inc.**  
305 Church Street SW  
Suite 719  
Huntsville, AL 35801  
Phone (256) 533-1575  
Fax (256) 533-1744

Copyright © 2011  
These drawings and design details are the property of LBVD. All rights reserved. No part of these drawings may be reproduced without written permission.

**HUNTSVILLE**  
The Heart of Alabama

CIVIL DETAILS  
**REDSTONE GATEWAY - PACKAGE 1A**  
CITY OF HUNTSVILLE  
HUNTSVILLE, ALABAMA

REV	DATE	BY	CHKD	APP'D	DESCRIPTION
1	2/9/2011	TBE			REVISIONS
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					
43					
44					
45					
46					
47					
48					
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
63					
64					
65					
66					
67					
68					
69					
70					
71					
72					
73					
74					
75					
76					
77					
78					
79					
80					
81					
82					
83					
84					
85					
86					
87					
88					
89					
90					
91					
92					
93					
94					
95					
96					
97					
98					
99					
100					